Release notes for ENDF/B Development e-049_In_000 evaluation

October 13, 2016

- `fudge-4.0` Warnings:

    1. Mislabled emitted particle
       Reading ENDF file: ../e-049_In_000.endf (Error # 0): ZAP messed up

       `WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0`

    2. FIXME: Generic fudge unimplemented message
       reaction label 1: e- + In + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

       `WARNING: Checking not yet implemented for energyLoss type data`

    3. FIXME: Generic fudge unimplemented message
       reaction label 2: e- + In [excitation] / Product: e- (Error # 0): Generic unimp (c)

       `WARNING: Checking not yet implemented for energyLoss type data`

- `fudge-4.0` Errors:

    1. Calculated and tabulated thresholds don't agree
       reaction label 0: e- + In [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

    2. Calculated and tabulated thresholds don't agree
       reaction label 1: e- + In + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

    3. Calculated and tabulated thresholds don't agree
       reaction label 2: e- + In [excitation] / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

    4. Calculated and tabulated thresholds don't agree
       reaction label 3: e- + e- + In1s1/2 / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 27921. eV!`

    5. Calculated and tabulated thresholds don't agree
       reaction label 4: e- + e- + In2s1/2 / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4213.8 eV!`

    6. Calculated and tabulated thresholds don't agree
       reaction label 5: e- + e- + In2p1/2 / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3942.5 eV!`

    7. Calculated and tabulated thresholds don't agree
       reaction label 6: e- + e- + In2p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3728.4 eV!
```

8. Calculated and tabulated thresholds don't agree
   reaction label 7: e- + e- + In3s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 811.24 eV!
```

9. Calculated and tabulated thresholds don't agree
   reaction label 8: e- + e- + In3p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 699.62 eV!
```

10. Calculated and tabulated thresholds don't agree
    reaction label 9: e- + e- + In3p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 660.67 eV!
```

11. Calculated and tabulated thresholds don't agree
    reaction label 10: e- + e- + In3d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 461.04 eV!
```

12. Calculated and tabulated thresholds don't agree
    reaction label 11: e- + e- + In3d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 453. eV!
```

13. Calculated and tabulated thresholds don't agree
    reaction label 12: e- + e- + In4s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 127.9 eV!
```

14. Calculated and tabulated thresholds don't agree
    reaction label 13: e- + e- + In4p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 90.77 eV!
```

15. Calculated and tabulated thresholds don't agree
    reaction label 14: e- + e- + In4p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 83.87 eV!
```

16. Calculated and tabulated thresholds don't agree
    reaction label 15: e- + e- + In4d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 25.49 eV!
```

17. Calculated and tabulated thresholds don't agree
    reaction label 16: e- + e- + In4d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 24.58 eV!
```

18. Calculated and tabulated thresholds don't agree
    reaction label 17: e- + e- + In5s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10.83 eV!
```

19. Calculated and tabulated thresholds don't agree
reaction label 18: e- + e- + In5p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4.91 eV!
```

20. Calculated and tabulated thresholds don't agree
reaction label 19: e- + e- + In5p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4.58 eV!
```

- `xsectplotter`   Warnings:

  1. Mislabled emitted particle
     Error: ZAP messed up

```
stderr while processing crossSection

      WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
... [2 more lines]
```